

IN THE CLAIMS:

1. (Previously presented) A processor-based system, comprising:
 - a first board;
 - a second board; and
 - a first connector coupled to the first board, comprising:
 - a first set of one or more wafers with one or more electrical connectors, wherein the one or more electrical connectors are coupled to one or more first pins, wherein the one or more first pins are oriented substantially ninety degrees from the one or more electrical connectors and coupled to the first board;
 - a first power module;
 - a first guide module for aligning the first connector with a second connector coupled to the second board, wherein the second connector comprises:
 - a second set of one or more wafers with one or more mating receptacles, wherein the one or more mating receptacles receive the one or more electrical connectors, wherein the one or more mating receptacles are coupled to one or more second pins, wherein the one or more second pins are oriented substantially ninety degrees from the one or more mating receptacles and coupled to the second board;
 - a second power module to couple to the first power module to electrically couple the first connector to the second connector; and
 - a second guide module for aligning the second connector with the first connector to parallelly couple the first board to the second board.
2. (Previously presented) The processor-based system of claim 1, wherein the first connector is a male connector.
3. (Cancelled)
4. (Previously presented) The processor-based system of claim 1, wherein the first guide module and the second guide module comprise one or more guide pins for aligning the first connector with the second connector.

5. (Previously presented) The processor-based system of claim 1, wherein the first connector further comprises a first support member and a second support member with one or more contact modules disposed therein.

6. (Original) The processor-based system of claim 1, wherein the first board is at least one of an I/O board and a system board, and wherein the second board is an expander board.

7. (Cancelled)

8. (Previously presented) The processor-based system of claim 1, wherein the first connector and the second connector are adapted to planarly couple the first board to the second board.

9. (Cancelled)

10. (Currently amended) An apparatus, comprising:

a first board;

an expander board;

a first connector having a first end adapted to be coupled to the first board and a second end adapted to be coupled to a second connector coupled to the expander board, wherein the first board and the expander board are coupled substantially in parallel when the first connector is coupled to the second connector, the first connector comprising:

one or more wafers, wherein the one or more wafers comprises:

a first set of electrical connectors to couple to one or more mating receptacles on the second connector, wherein the first set of electrical connectors is coupled to a set of corresponding pins, wherein the set of corresponding pins are oriented substantially ninety degrees to the first set of electrical connectors;

a conductive layer coupled to one or more compliant pins, wherein the one or more compliant pins coupled to the conductive layer secure the one or more wafers to the expander board;

a power module; and

a first guide module for aligning the first connector with the second connector coupled to the expander board comprising a guide pin, wherein the first guide module aligns the first connector with a second guide module on the second connector coupled to the expander board, wherein the second guide module comprises a corresponding opening for the guide pin to align the first connector and the second connector by slidingly engaging the guide pin.

11. (Previously presented) The apparatus of claim 10, wherein the expander board couples the first board to a switch.

Claims 12-17 (Cancelled)

18. (Previously presented) A method, comprising:

coupling a first connector to a first printed circuit board, wherein the first connector receives and delivers at least one first voltage;

aligning the first connector with a second connector coupled to a second printed circuit board using a first guide module comprising a guide pin, wherein the first guide module aligns the first guide module on the first connector with a second guide module on the second connector, wherein the second guide module comprises a corresponding opening for the guide pin to slidingly engage the guide pin, wherein aligning the first connector with the second connector aligns the first printed circuit board and the second printed circuit board substantially parallel;

coupling the second printed circuit board to the first printed circuit board using the first connector and the second connector, wherein the coupled first and second printed circuit boards are substantially parallel to each other; and

providing power at a second voltage from the first printed circuit board to the second printed circuit board using a power module in the first connector, wherein the second voltage is larger than the first voltage.

19. (Previously presented) The method of claim 18, wherein the first connector includes a first set of electrical connectors and a second set of electrical connectors positioned substantially perpendicular to each other, wherein coupling the first connector to the first printed circuit board comprises coupling the first set of electrical connectors to the first printed circuit board.

20. (Previously presented) The method of claim 19, wherein coupling the first set of electrical connectors to the first printed circuit board comprises inserting the first set of electrical connectors through one or more openings in the first printed circuit board, wherein the electrical connectors contract into and hold in the openings.

21. (Original) The method of claim 19, wherein coupling the second printed circuit board to the first printed circuit board comprises coupling the second set of electrical connectors to the second printed circuit board.

22. (Previously presented) The method of claim 19, wherein the second connector has one or more receptacles, wherein coupling the second set of electrical connectors to the second printed circuit board comprises inserting the second set of electrical connectors in the one or more receptacles of the second connector.

Claims 23-25 (Cancelled)

26. (Currently amended) A connector, comprising:
a top supporting member;
a bottom supporting member;
one or more wafers coupled to the top supporting member and bottom supporting member;

a power module; ~~and~~
a guide module for aligning the connector with an expander board; and
a joinder module wherein the joinder module couples multiple connectors in series.

27. (Previously presented) The connector of claim 26, wherein the one or more wafers receive and deliver at least one first voltage, wherein the first voltage is about 2-4 volts during use.

28. (Previously presented) The connector of claim 26, wherein the power module receives and delivers a second voltage of approximately 48 volts during use.

29. (Previously presented) The connector of claim 26, wherein the guide module comprises one or more guide pins.

30. (Previously presented) The method of claim 18, wherein the first voltage is about 2-4 volts and the second voltage is about 48 volts.

31. (Currently amended) A connector, comprising:

one or more wafers comprised between a top supporting member and a bottom supporting member, wherein the one or more wafers includes a conductive layer to shield the one or more wafers from interference and wherein the conductive layer is coupled to one or more compliant pins that contract into one or more respective holes on an expander board to secure the one or more wafers to the expander board;

a power module; and

a guide module to align the one or more wafers with a second connector, wherein the one or more wafers and the second connector couple ~~an~~ the expander board and a circuit board substantially in parallel.

32. (Previously presented) The connector of claim 31, wherein the circuit board is a system board or an input/output board.

33. (Previously presented) The connector of claim 31, further comprising:
a joiner module for connecting the connector with the second connector.
34. (Previously presented) The connector of claim 33, wherein the joiner module
further couples the connector to the expander board.
35. (Previously presented) The connector of claim 31, wherein the one or more
wafers comprise a male connector and the second connector comprises a female
connector.